

Delta Operations for Salmonids and Sturgeon (DOSS) Group
Data only: 12/31/13

Objective: Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmonids and green sturgeon. DOSS will work with other technical teams. DOSS notes and advice can be found at: http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/doss.html.

NOTE: Because of the holiday schedule, DOSS did not meet today; however, data were received and disseminated to the DOSS group. NMFS provides a summary here.

Fish Monitoring: The following table presents fish monitoring data. Unless otherwise noted, reported sizes are fork length. See also: <http://www.water.ca.gov/swp/operationscontrol/calFed/calFedMonitoring.cfm>.

Location	Chippis Is. Midwater Trawl	Sacramento Trawls	Mossdale Kodiak Trawl	GCID	Knights Landing RST	Tisdale RST	Beach Seines
Sample Date	12/23, 24, 27	12/23, 24, 27	12/23, 24, 27	12/23–31	12/24, 26–29	12/24, 26–30	12/23, 24, 26
Total Catch	21	0	0	1,134	0	0	2
FR				1,062			1 (34 mm)
WR				36			
SR				23			
LFR				13			
Ad-Clipped Chinook	1 (161 mm)			21 (20 LFR; 1 WR smolt) ¹			
DS	13 (56–74 mm)						1 (67 mm)
Splittail							
Longfin	7 (97–119 mm)						
SH (ad-clip)							
SH (wild)							
W. Temp. (avg. °F)	47.5	46.6	47.5	54.0	48.0	36.0	46.8
Flows (avg. cfs)					4,653	4,353	
Turbidity (avg. NTU)	21.4	9.8	8.7	1.9	3.6 ²	7.2	9.2
WR/LFR Avg. CPUE				6.20			
FR/SR Avg. CPUE							

CPUE = catch per unit of effort reported as the average fish/hour over reported sampling dates; ACT = acoustic tag; GCID = Glenn–Colusa Irrigation District; RST = rotary screw trap

¹No winter-run hatchery fish have been released. This fish is most likely a late-fall Chinook from the production release.

²Note that FTU is used at Knight’s Landing in place of NTU.

Tisdale & Knights Landing: Cones raised on 12/24 in the afternoon; did not fish again until Thursday morning, 12/26. Tisdale raised at 15:15 (12/24) lowered 07:30 (12/26). Knights Landing raised at 17:00 (12/24); lowered at 08:00 (12/26).

Fish Salvage: Fujimura (DFW) reported by email the data for 12/23–29. No listed fish species or white sturgeon were salvaged at SWP or CVP during this period. Preliminary results from 12/30 indicate that no listed fish species or white sturgeon were salvaged at SWP or SVP.

Stuart (NMFS) reported by email that there were 22 *O. mykiss* moving upstream past the counting weir on the Stanislaus River, 14 of which were greater than 16 inches long, with 5 of those being adipose-fin clipped.

Operations (12/31/13)

SWP		CVP	
Exports (cfs)			
Clifton Court Forebay	1,200	Jones Pumping Plant	850
Reservoir Releases (cfs)			
Feather - Oroville	1,250	American - Nimbus	1,100
		Sacramento - Keswick	3,750 (ramping down to 3,250 cfs by 1/05/14**)
		Stanislaus - Goodwin	200
Reservoir Storage (in TAF, % of capacity)			
San Luis (SWP)	273 (26)	San Luis (CVP)	328 (34)
Oroville	1,289 (36)	Shasta	1,674 (37)
New Melones	1,048 (43)	Folsom	188 (19)
Delta Operations			
DCC	Closed (on 12/1)	Sacramento River at Freeport (cfs)	7,905
Outflow Index (cfs)	~5,400	San Joaquin River (cfs) at Vernalis	981
Total Delta Inflow (cfs)	~9,373	OMR (daily) (cfs)	
Water Temperature (°F)		OMR 5-day avg (cfs)	
X2 (km)	>81	OMR 14-day avg (cfs)	
E/I (%)	24.7 (3-d avg)		

** Keswick Reservoir scheduled releases obtained from the following website: <http://cdec.water.ca.gov/cgi-progs/lastRes>.

Weather: Fujimura (DFW) provided the January forecasts for temperature and precipitation from the Climate Prediction Center, which predicted warmer and drier than normal conditions.

RPA Actions:

- IV.1.1 (monitoring and alerts for DCC gate operations): No alerts tripped in the past week.
- IV.1.2 (DCC gate operations): No triggers exceeded in the past week.
- IV.3 (salvage and entrainment reduction): No triggers exceeded in the past week; this action ends today, 12/31.
- IV.2.3 (OMR flow management): As of tomorrow, 1/1/14, Old and Middle river (OMR) flow management will be in effect. Net OMR flows will be no more negative than -5,000 cfs. Changes in OMR flows to more positive values will be dependent on the trigger

criteria being exceeded for older juvenile Chinook salmon loss, coded wire tag surrogates, or wild steelhead loss density (see criteria in RPA action IV.2.3 for details).

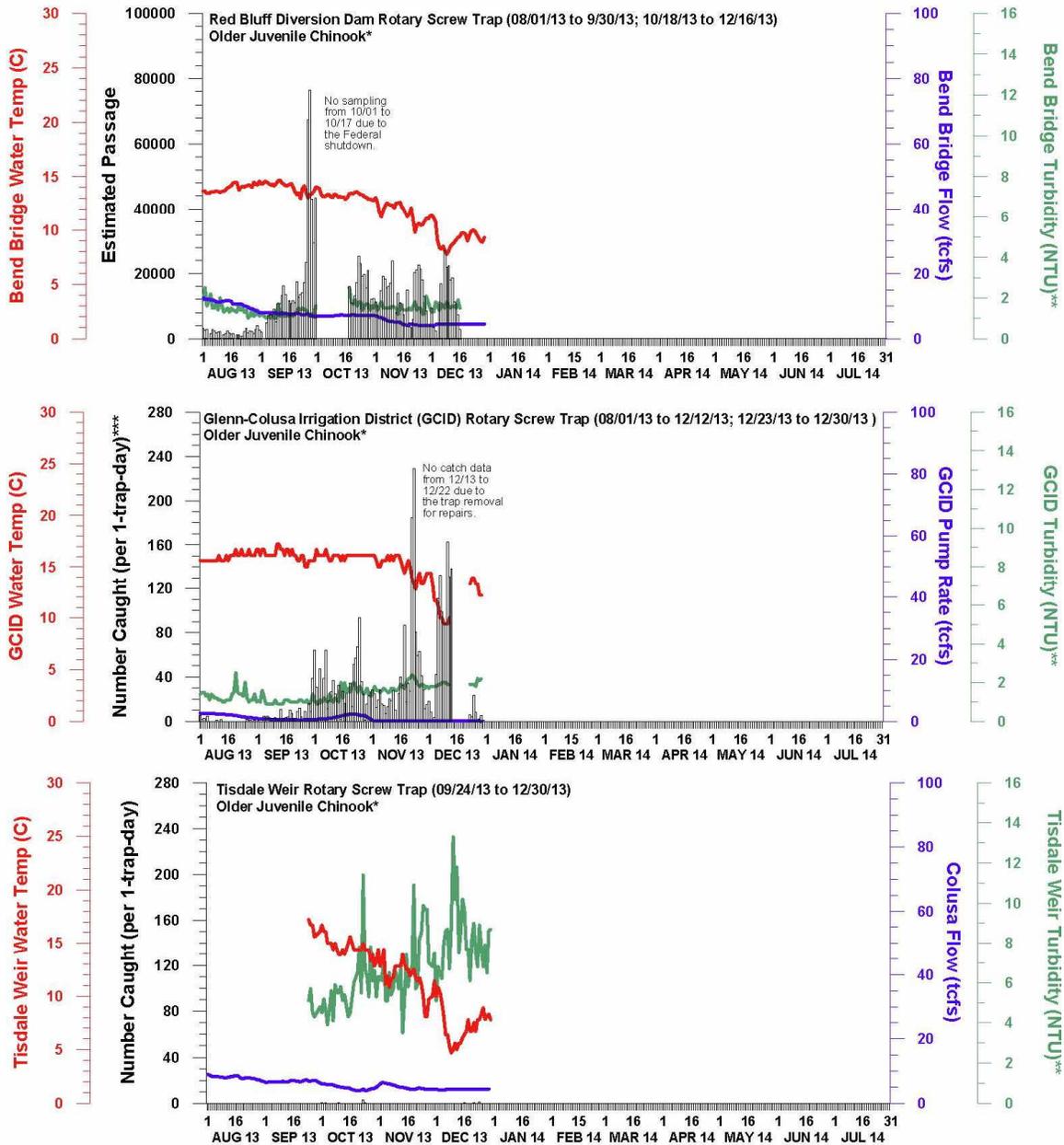
Smelt Working Group (SWG): Data were distributed to participants on 12/30, but SWG did not meet. Previous SWG meeting notes are available at: http://www.fws.gov/sfbaydelta/cvp-swp/smelt_working_group.cfm.

DOSS Advice to WOMT and NMFS: None

Next Meeting: The next scheduled DOSS conference call will be on 1/7/14 at 9:00 a.m.

Below are graphs provided by DWR for Chinook salmon and steelhead observed at monitoring locations in the Sacramento and San Joaquin rivers and Delta. For additional graphs, please visit the DWR website at: <http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm>.

NUMBER OF UNMARKED OLDER JUVENILE CHINOOK MEASURED IN THE SACRAMENTO RIVER



DWR-DES 30 DEC 2013

Preliminary data from DFW, FWS, GCID, and CDEC; subject to revision.

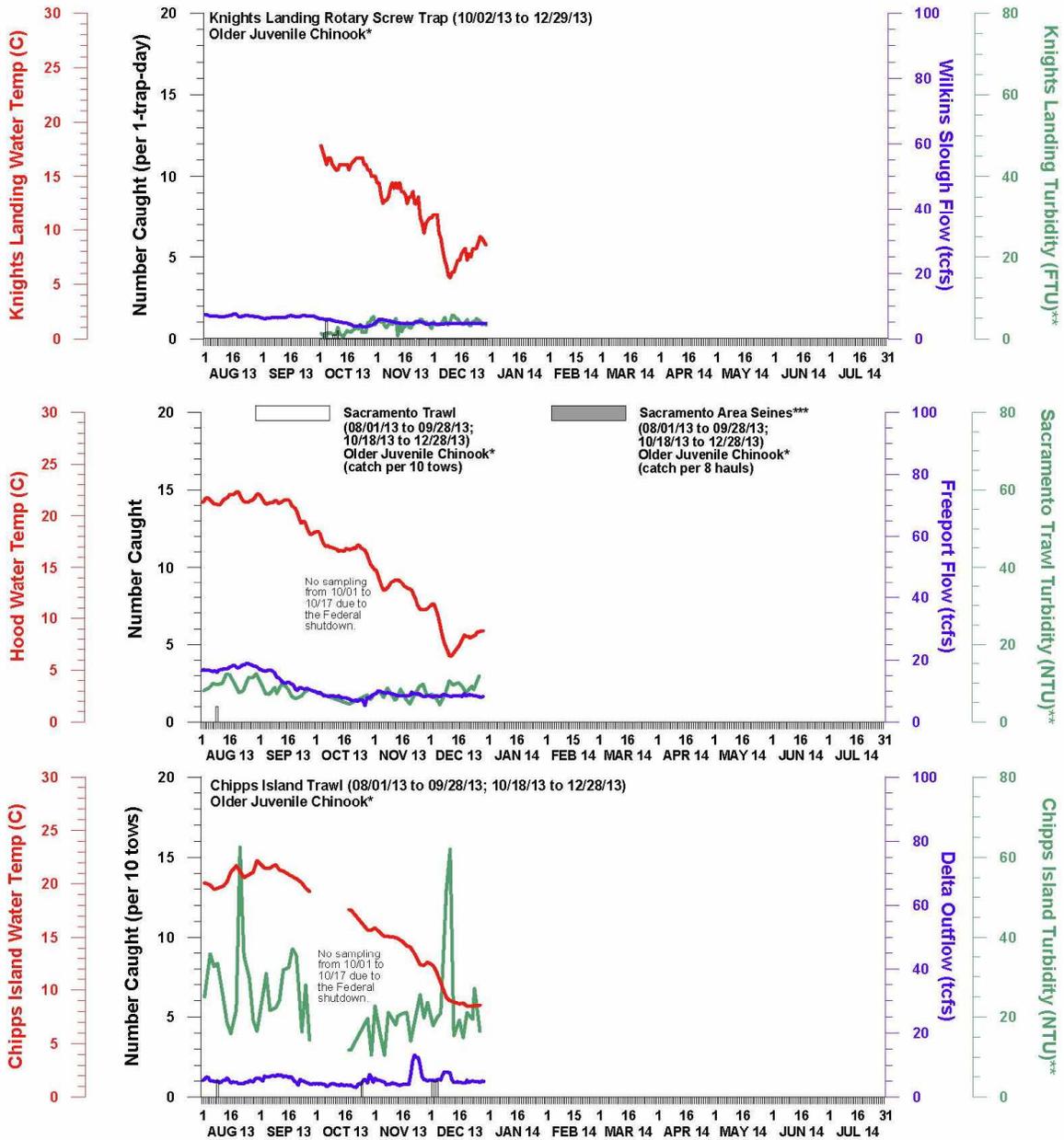
*Older juvenile Chinook defined as all Chinook greater than or equal to the minimum winter run length-at-date criteria and less than the maximum size included in the length-at-date criteria (Frank Fisher model) for which a race is assigned on a given sampling date.

**Turbidity is a discrete measurement and is not measured continuously. Therefore, data are interpolated on days when turbidity was not measured.

***GCID: Five older juveniles caught on 9/25, 9 older juveniles caught on 9/27, 57 older juveniles caught on 10/5 and 23 older juveniles caught on 11/14.

However, catch could not be standardized to 1-trap day since hours fished could not be calculated due to problems with the revolution counter. As a result, data are not presented on the graph.

NUMBER OF UNMARKED OLDER JUVENILE CHINOOK MEASURED IN THE LOWER SACRAMENTO RIVER AND CHIPPS ISLAND



DWR-DES 30 DEC 2013

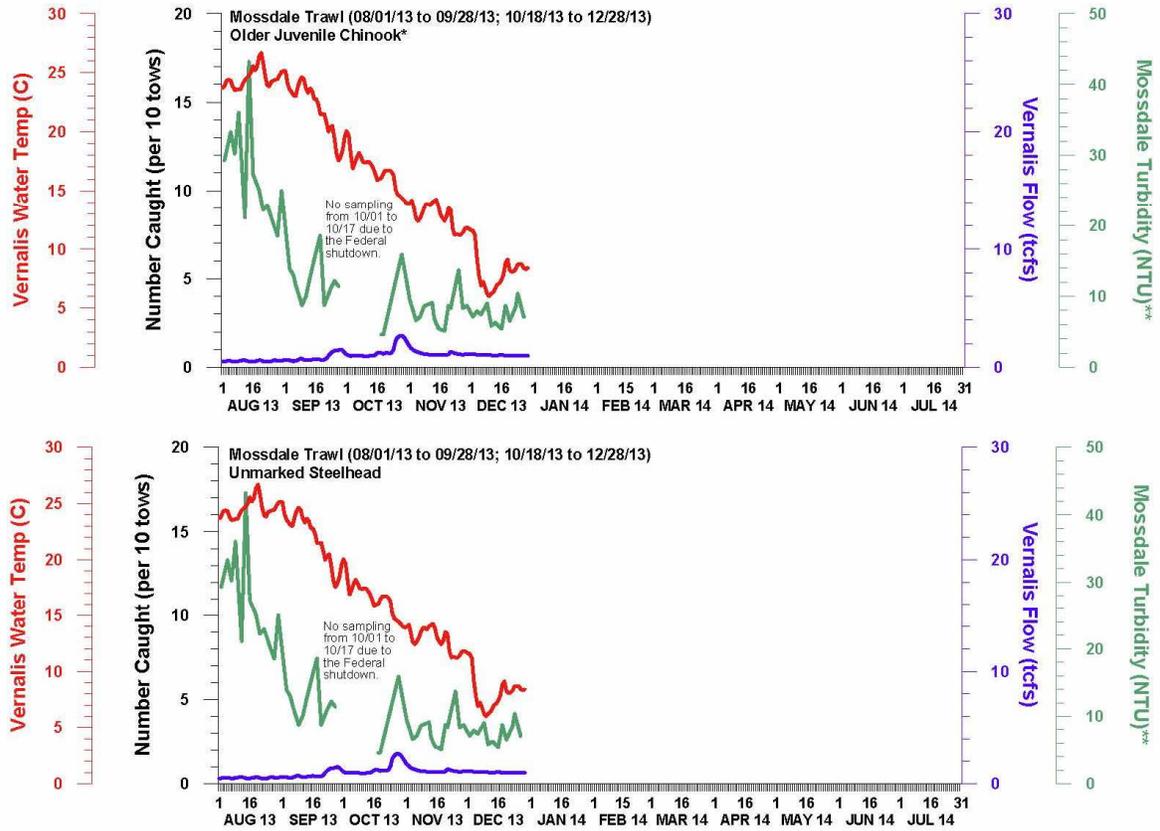
Preliminary data from DFW, FWS, and CDEC; subject to revision.

*Older juvenile Chinook defined as all Chinook greater than or equal to the minimum winter run length-at-date criteria and less than the maximum size included in the length-at-date criteria (Frank Fisher Model) for which a race is assigned on a given sampling date.

**Turbidity is a discrete measurement and is not measured continuously. Therefore, data are interpolated on days when turbidity was not measured. Knights Landing turbidity measured in FTU, which should be roughly equivalent to NTU.

***Sacramento area seine route consists of the following seine sites: Verona, Elkhorn, Sand Cove, Discovery Park, American River, Miller Park, Sherwood Harbor, and Garcia Bend. Bars are stacked if Chinook caught from the trawl and seines are from the same day.

NUMBER OF UNMARKED OLDER JUVENILE CHINOOK AND STEELHEAD MEASURED IN THE SAN JOAQUIN RIVER



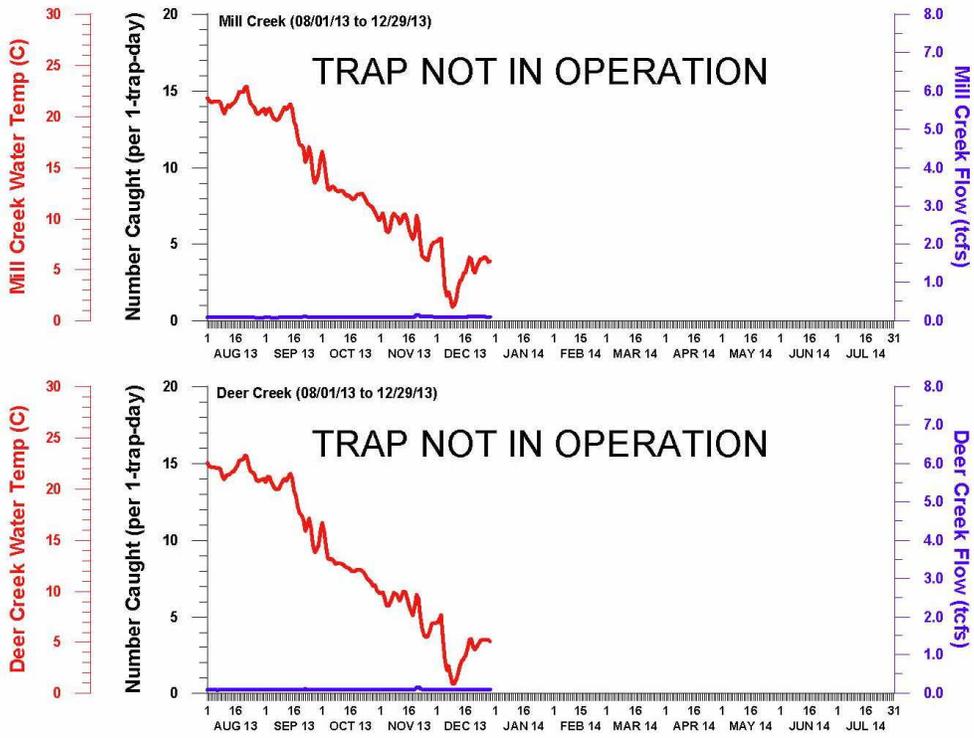
DWR-DES 30 DEC 2013

Preliminary data from FWS and CDEC; subject to revision.

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WATER TEMPERATURE AND FLOW MEASURED AT MILL AND DEER CREEK



DWR-DES 30 DEC 2013
Preliminary data from CDEC; subject to revision.